

1 **Docket: JMC-19**

2
3
4 **AN OZONIZER APPARATUS EMPLOYING A MULTI-COMPARTMENT**
5 **BAG FOR STERILIZING**
6

7
8 **ABSTRACT OF THE DISCLOSURE**
9

10 A sealed multi-chambered bag, that is a flexible container, is made of dielectric
11 material and contains two electrode plates (preferably screen plates) that are
12 separated by an internal wall of the bag. Materials to be sterilized are placed between
13 one or the other or both of the electrode plates and the interior wall. The interior wall
14 allows the plates to be contained within the bag without the risk of damaging high
15 voltage discharges occurring between plates. optimal ozone production occurs in the
16 bag immediately adjacent to where the materials to be sterilized are located. The bag
17 is placed within a chamber containing an aperture which is connected to the intake of a
18 pump. A conductor connects each electrode plate to an opposed terminal of a high
19 tension transformer. Both the pump and the transformer are connected to timing
20 circuitry, which turns on the pump and the transformer and, then periodically turns the
21 pump off and on to deflate and re-inflate the chambered bag and circulates the ozone
22 produced therein to all virulence on the materials being sterilized. The gas within the
23 bag alternatively expands and compresses before the transformer is turned off. The
24 timer circuit allows the pump to continue to cycle on and off thereafter (preferably at an
25 increased cycling rate) until the ozone off gas remaining in the bag is destroyed by
26 molecular collision, surface reactions or otherwise.
27
28